IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Francis et al.

Serial No. 09/543,952

Filed: April 6, 2000

For: System, Apparatus and Method of Transformation of Java Server Pages into PVC Formats

System Server Pages into PVC Formats

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

36736 PATENT TRADEMARK OFFICE CUSTOMER NUMBER

APPEAL BRIEF (37 C.F.R. 41.37)

This brief is in furtherance of the Request for Reinstatement of Appeal, filed in this case on January 29, 2007.

No fees are believed to be required. If, however, any fees are required, I authorize the Commissioner to charge these fees which may be required to IBM Corporation Deposit Account No. 09-0461. No extension of time is believed to be necessary. If, however, an extension of time is required, the extension is requested, and I authorize the Commissioner to charge any fees for this extension to IBM Corporation Deposit Account No. 09-0461.

REAL PARTY IN INTEREST

The real party in interest in this appeal is the following party: International Business Machines Corporation of Armonk, New York.

RELATED APPEALS AND INTERFERENCES

With respect to other appeals or interferences that will directly affect, or be directly affected by, or have a bearing on the Board's decision in the pending appeal, there are no such appeals or interferences.

STATUS OF CLAIMS

A. TOTAL NUMBER OF CLAIMS IN APPLICATION

Claims in the application are: 1-31.

B. STATUS OF ALL THE CLAIMS IN APPLICATION

- 1. Claims canceled: None.
- 2. Claims withdrawn from consideration but not canceled: None.
- 3. Claims pending: 1-31.
- 4. Claims allowed: None.
- 5. Claims rejected: 1-31.
- 6. Claims objected to: None.

C. CLAIMS ON APPEAL

The claims on appeal are: 1-31.

STATUS OF AMENDMENTS

No amendment after final rejection was filed in response to the final rejection dated December 5,2006.

SUMMARY OF CLAIMED SUBJECT MATTER

Information exchange using the internet is ubiquitous. The use of Java Server Pages (JSPs) for the generation of dynamic HyperText Mark-up Language (HTML) content is becoming more popular. JSP provides a methodology by which (i) information related to the content and (ii) information related to the presentation of the content may be separated. For example, JSP provides a

bean> tag which is utilized to obtain content, such as Java applets, while HTML tags are used to specify presentation of the content.

A problem arises in these prior JSPs in that they are designed with the assumption that the presentation of the content will be rendered in a browser that executes on a desktop workstation with a full-sized, high resolution, full-color monitor. As the use of mobile handheld pervasive computing (PvC) devices becomes more prevalent, the assumption used in the design of JSPs becomes a stumbling block since there is a need to deliver the JSP to a variety of different types of PvC devices whose browsing screen size capabilities are drastically different from that of a desktop workstation.

One way to address this problem is to have a transcoding proxy server, or servlet, intercept the JSP and transcode it dynamically, i.e., on the fly, as the JSP is being sent to the PvC device. This option results in extra overhead costs incurred each and every time the JSP is invoked.

A second approach to solving this problem is to have a human JSP developer design and create separate JSPs for each and every PvC device one might want to support. This approach has the disadvantage of extra cost required to have the additional JSPs authored by a human developer who needs to be cognizant of the capabilities of the PvC devices he or she intends to support.

Thus, it would be advantageous to have a system, apparatus and method that provides a mechanism by which JSPs may be automatically converted to formats useable by a plurality of PvC devices.

Generally, the present invention is directed to a technique for automatic conversion of Java server pages (JSP) to formats usable by a plurality of pervasive computing devices such as wireless and handheld devices. Two types of tags (HTML and JSP) are contained in the JSP, where one type of tag (HTML tag) is converted to a tag compatible with the particular pervasive computing device requesting content, and the other type of tag (JSP tag) is masked during the conversion process and then subsequently unmasked as the JSP tag does not need to be converted, so it is instead 'hidden' during the conversion process.

A. CLAIM 1 - INDEPENDENT

The subject matter of Claim 1 is directed to a method of transforming a Java Server Page (JSP) file into a pervasive computing (PvC) device specific JSP file (Figures 6 and 7, page 12, line 29 through page 15. line 3). The method contains the following steps:

- receiving a request for the JSP file at the server where the JSP file is stored, the request being sent from the PvC device (601 of Figure 6, page 12, lines 30-32);
- locating JSP tags in the JSP file (702, 703 of Figure 7, page 13, lines 22-25);
- masking these JSP tags (707, page 13, line 29 through page 14, line 1);
- converting non-masked tags in the JSP file into PvC device specific format tags (710, page 14, lines 3-7);
- unmasking the JSP tags (717, page 14, lines 26-31); and
- storing the transformed JSP file, which now contains PvC device specific format tags and JSP tags (719, page 15, lines 1-2);
- all of the steps are performed by the server mentioned in the receiving step (page 10, lines 4-30).

B. CLAIM 8 - INDEPENDENT

The subject matter of Claim 8 is directed to an apparatus for transforming a JSP file into a PvC device specific JSP file (**Figures 1** and **2**, page 5, line 4 – page 7, page 26). The apparatus contains a processor (**202**, **204**, page 6, lines 22-25) and a storage device (**208**, **209**, **232**, page 6, line 26 through page 7, line 15) and performs the method of claim 1.

C. CLAIM 15 - INDEPENDENT

The subject matter of Claim 15 is directed to a computer program product in a computer readable medium for transforming a JSP file into a PvC device specific JSP file (page 15, lines 9-21). The computer program contains instructions that perform the method of claim 1.

D. CLAIM 22 - INDEPENDENT

The subject matter of Claim 22 is directed to a system for transforming a JSP file into a PvC device specific JSP file (Figures 1 and 2). The system contains means to perform the steps of claim 1:

- means for receiving a request, sent from the PvC device, for the JSP file at a server where the
 JSP file is stored (means not specifically shown, performs step 601, page 12, lines 30-32);
- means for locating the JSP tags in the JSP file (means not specifically shown, performs step 702, 703, page 13, lines 22-25);
- means for masking the JSP tags (means not specifically shown, performs step 707, page 13, line 29 through page 14, line 1);
- means for converting non-masked tags in the JSP file into PvC device specific format tags (means not specifically shown, performs step 710, page 14, lines 3-7);
- means for unmasking the JSP tags (means not specifically shown, performs step 717, page 14, lines 26-31); and
- means for storing a transformed JSP file containing the PvC device specific format tags and the JSP tags (means not specifically shown, performs step 719, page 15, lines 1-2);
- the various means are at the server (200, page 10, lines 4-30).

E. CLAIM 23 - DEPENDENT and MEANS-PLUS-FUNCTION

Although Claim 23 is a dependent means plus function claim, no additional means for elements are recited in such claim (over and above those that are recited in Claim 22).

F. CLAIM 24 - DEPENDENT and MEANS-PLUS-FUNCTION

Although Claim 24 is a dependent means plus function claim, no additional means for elements are recited in such claim (over and above those that are recited in Claim 22).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection to review on appeal are as follows:

- Whether Claims 1, 6, 7, 8, 13, 14, 15, 20-22, 27 and 28 are obvious over Hawkins et al., Method and Apparatus for Communicating Information Over Low Bandwidth Communications Networks, U.S. Patent No. 6,343,318 (January 29, 2002) (hereinafter "Hawkins") in view of "Java Servlet Programming" by Jason Hunter, published November 1, 1998 (hereinafter "Hunter") and in further view of Ginter et al., Systems and Methods for Secure Transaction Management and Electronic Rights Protection, U.S. Patent No. 5,892, 900 (April 6, 1999) (hereinafter "Ginter") under 35 U.S.C. 8 103(a);
- Whether Claims 2, 3, 9, 10, 16, 17, 23 and 24 are obvious over Hawkins in view of Hunter, further in view of Judson, Content Display During Idle Time as a User Waits for Information During an Internet Transaction. U.S. Patent No. 6,185,586 (February 6, 2001) (hereinafter "Judson") under 35 U.S.C. § 103(a);
- Whether Claims 4-5, 11-12, 18-19 and 25-26 are obvious over Hawkins, further in view of Ginter and further in view of Ramaley et al., Method for Managing Embedded Files into a Document Saved in HTML Format, U.S. Patent No. 6,585,777 (July 1, 2003) (hereinafter "Ramaley") under 35 U.S.C. § 103(a); and
- 4. Whether Claims 29-31 are obvious over Hawkins in view of Hunter, further in view of Ginter and further in view of Toyouchi et al., Service Providing System and Method Which Divides a Request into Plural Service Requests and Provides and Integrated Service Based on Service Utilization History Information in Response to the Request, U.S. Patent No. 6,847,988 (January 25, 2005) (hereinafter "Toyouchi") under 35 U.S.C. § 103(a).

ARGUMENT

A. GROUND OF REJECTION 1 (Claims 1, 6, 7, 8, 13, 14, 15, 20-22, 27 and 28)

Claims 1, 6, 7, 8, 13, 14, 15, 20-22, 27 and 28 stand rejected under 35 U.S.C. § 103 as being unpatentable over **Hawkins** et al., <u>Method and Apparatus for Communicating Information Over Low Bandwidth Communications Networks</u>, U.S. Patent No. 6,343,318 (January 29, 2002) (hereinafter "Hawkins") in view of <u>Java Servlet Programming</u> by Jason Hunter, published November 1, 1998 (hereinafter "Hunter"), and in further view of <u>Ginter</u>, <u>Systems and Methods for Secure Transaction Management and Electronic Rights Protection</u>, U.S. Patent No. 5,892,900 (April 6, 1999) (hereinafter "Ginter").

A.1. Claims 1, 8, 15 and 22

With respect to Claim 1, the rejection states:

Regarding independent claim 1 Hawkins discloses transforming a file into a pervasive computing device specific file. Hawkins recites: "The <u>proxy server 180 responds to requests</u> by wireless clients 405 ... The proxy server 180 carries most of the burden of bringing the information from the Internet 190, converting it ... and transferring it to the wireless client 405 ...

Hawkins discloses in Figure 1 receiving a request for the original file at a server ... the file being stored at the server. As shown in Figure 1 ... the server is shown at reference sign 140 (described as 'Web Server'). The server is shown storing a document at reference sign 144 (described as "HTML Page").

Hawkins discloses performing the conversion process steps at the server. Hawkins recites: "server 180 caries most of the burden of bringing the information from the internet 190, converting it to wireless client 405 compatible CTP and CML formats, and transferring it to the wireless client 405 over the wireless network' (column 261. lines 1 8-23).

Claim 1 is directed toward the file being a Java Server Page (JSP) file, JSP files differ from plain markup language files in that JSP markup includes executable code for program execution, rather than just tags for formatting control. Hawkins discloses that the file contains executable program code Hawkins recites: "Alternatively, some programs are customized for accessing specific information from particular web sites. Examples of these programs are Java applets that reside on the client or are served to the client by a server" (column 3. lines 14-17).

However Hawkins fails to explicitly recite JSP. <u>Hunter teaches that Java</u> applets that are received from a server (called servlets) are the same as Java

Server Pages. Hunter recites: Just as this book was going to press, Sun announced a new way to use servlets, called Java Server pages (commonly, but not officially referred to as JSP). JSP's functionality and syntax bear a remarkable resemblance to Active Server Pages "ASP") (first paragraph of section 2.6). Therefore, it would have been obvious, to one of ordinary skill in the art, at the time the invention was made, to use JSP style program code, as taught by Hunter, in the program code enabled files of Hawkins. because Hunter teaches that the functionality and syntax of JSP's resemble other server page languages. ...

Hawkins and Hunter fail to disclose the masking and unmasking of specific tags in the conversion process Ginter teaches the use of masking tags. Ginter recites: "UDEs 1200 are preferably encrypted using a site specific key once they are loaded into a site. This site-specific key masks a validation tag" (column 150, lines 35-37).

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time the invention was made, to combine the masking of tags as taught by Ginter with the transformation of files for pervasive computing devices as taught by Hawkins and Hunter in order to "maintain the integrity, availability, and/or confidentiality of such information and processes related to such use' (Ginter, column 1, lines 13-15).

Office Action mailed June 7, 2006, pages 3-6, emphasis added

The determination of "nonobviousness" is made after establishing the scope and content of prior art, the differences between the prior art and the claims at issue, and the level of ordinary skill in the pertinent art. *Graham v. John Deere*, 383 U.S. 1 (1966). In addition, all limitations of the claimed invention must be considered when determining patentability. *In re Lowry*, 32 F.3d 1579, 1582, 21 U.S.P.Q.2d 1031, 1034 (Fed Cir. 1994). A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPO2d 1430 (Fed. Cir. 1990).

Claim 1 recites:

A method of transforming an original Java Server Page (JSP) file into a
pervasive computing (PvC) device specific JSP file, comprising:
receiving a request for the original JSP file at a server, wherein the request
is sent from the PvC device, and wherein the original JSP file is stored on the
server;

parsing the original JSP file for JSP tags; masking the JSP tags; converting non-masked tags in the original JSP file into PvC device specific format tags:

unmasking the JSP tags; and

storing a transformed JSP file containing the PvC device specific format tags and the JSP tags, wherein the parsing, masking, converting, unmasking and sending steps are performed by the server.

A proper *prima facie* case of obviousness has not been made against Claim 1 because the combination of references does not disclose all of the elements of the claim, nor do the references suggest the desirability of their combination. These problems will be discussed separately.

Claimed Features

The rejection asserts that "Hawkins discloses transforming a file into a pervasive computing device specific file", but does not show that Hawkins discloses the specific steps of the invention recited in claim 1. The elements of claim 1 that are not met by the combination of Hawkins, Hunter, and Ginter are numerous and include the following elements that will be specifically addressed: (1) the combination does not disclose a single server performing the recited steps. (2) the combination does not disclose that the file to be transformed contains JSP pages or their equivalent, (3) the combination does not disclose the masking and unmasking of JSP tags, and (4) the combination does not disclose a selective conversion of tags based on tag-type.

Single Server not Shown Performing the Recited Steps

Claim 1 recites that a single server provides both the content of the web page (the original JSP page is stored on the server) and converts the page into a format compatible with the PvC device (converting ... tags). An advantage to this approach is that a content provider can provide access for portable devices, without relying on an intermediary server to provide special services. Hawkins does not disclose a single server that provides the recited steps. Instead, Hawkins discloses:

One embodiment of the invention includes a system having a distributed web site. The web site is distributed between a client, a server and a web server. The client stores a set of predefined applications that correspond to a part of the web site. The applications include data formatted according to a first markup language. From the set of predefined applications, the client can generate queries. The server receives the queries and generates new, related

queries. The new queries correspond to a second query protocol. The second query protocol is used by the web server. The web server generates responses to the new queries and sends these responses to the server. The responses are formatted according to a second markup language. These responses correspond to the second portion of the web site. The server then converts the responses into new responses that the client can use.

Hawkins, column 3, lines 33-47

This excerpt discloses that the functions of a web site are distributed across (1) two servers and (2) the client. For instance, a query page where the user can request a specific piece of information would normally be stored on a web server and delivered to the user when the user enters the web site. Hawkins discloses that such a page is preferably included as "pre-loaded content" (column 12, line 32) on the client device. Even the rejection acknowledges that two different servers are involved in the process shown in Hawkins, noting that "the server is shown at reference sign 140 (described as 'Web Server'') ... storing a document at reference sign 144" and "Hawkins recites: "server 180 carries most of the burden of bringing the information". Thus, Hawkins does not disclose a single server that will perform the claimed steps of "receiving a request ... parsing the original JSP file for JSP tags; masking the JSP tags; converting non-masked tags ... unmasking the JSP tags; and storing a transformed JSP file". Therefore Hawkins does not meet this feature of the claims. Additionally, Hunter and Ginter, when considered as a whole, do not disclose or suggest a single server performing the steps of claim 1, nor has the Examiner shown otherwise. Therefore, since none of the cited references disclose this feature, a proper prima facie case of obviousness has not been made against Claim 1.

File to be Transformed Does Not Contain Executable Program Code

The rejection asserts that "Hawkins discloses that the file contains executable program code", apparently referring to the claimed feature of a "JSP file" that is being transformed pursuant to the features recited in Claim 1. However, the reference to applets in Hawkins is in the context of very specialized programs (Hawkins col. 3, lines 20-23) that have little or nothing in common with the claimed JSP file. A more complete quote from Hawkins states:

Alternatively, some programs are customized for accessing specific information from particular web sites. Examples of these programs are Java applets that reside on the client or are served to the client by a server. The applets can then be reused to access information from a web site. An example of a specialized program for accessing specific information is the RealVideo Player from Real Networks, Inc. A problem with these types of programs is that they are very specific to a particular type of content. For example, they do not use standard HTML (hypertext markup language) constructs. This means that web site developers cannot use standard web site development tools to create their sites.

Hawkins, column 3, lines 14-25

Hawkins refers to exemplary applets "that reside on the client or are served to the client", so that the disclosed applets are executed on the client. This teaching is in contrast to the claimed JSP file, which contains executable code and is transformed on the server. Thus, in the context of delivering a web page to a client, as the claimed invention is doing, it is incorrect to equate an applet executing on the client (as per the teachings of the cited reference) as being equivalent to transforming a JSP file containing executable code on a server (as claimed).

Even assuming arguendo that the disclosed applet were incorporated into the conversion method of **Hawkins** (which it is not), an applet on the client would not be involved in the transformation of a web page on a server that is recited in the claims. Further, **Hawkins** does not disclose or suggest that the mentioned applets are incorporated into the conversion methodology that is disclosed elsewhere in the reference.

Additionally, although **Hunter** and **Ginter** are not cited to disclose this feature, neither **Hunter** nor **Ginter**, when considered as a whole, disclose or suggest that the file being transformed contains executable program code, nor has the rejection asserted otherwise. Since none of the cited references disclose or suggest this feature, a proper prima facie case of obviousness has not been made against Claim 1.

Unmasking of JSP Tags Is Not Shown

Claim 1 explicitly recites "masking the JSP tags" and "unmasking the JSP tags". The rejection asserts that "Ginter teaches the use of masking tags". However, neither Ginter nor the proposed combination considered as a whole discloses or suggests the step of "unmasking the

JSP tags". The excerpt of Ginter cited against the steps of masking and unmasking JSP tags states:

UDEs 1200 are preferably encrypted using a site specific key once they are loaded into a site. This site-specific key masks a validation tag that may be derived from a cryptographically strong pseudo-random sequence by the SPE 503 and updated each time the record is written back to the 40 secure database 610. This technique provides reasonable assurance that the UDE 1200 has not been tampered with nor substituted when it is requested by the system for the next use.

Ginter, column 150, lines 34-42

Although the above excerpt mentions that a validation tag is masked by the site-specific key, Ginter does not disclose or suggest that such a validation tag is later unmasked. In contrast, per the features of Claim 1, the JSP tag is unmasked so that the tag can be used to retrieve dynamic information for the JSP page. Additionally, the rejection admits that this feature is not disclosed or suggested by Hawkins or Hunter. Nor is this validation tag any type or form of a JSP tag. Claim 1 expressly recites that the tags that are masked and unmasked are JSP tags. Therefore, since none of the references relied on disclose or suggest the feature of "unmasking the JSP tags", the combination of the references when considered as a whole does not teach or suggest all of the features of the claims. Accordingly, no prima facie case of obviousness has been shown against Claim 1.

Selective Conversion of Tags Based on Tag-type Is Not Shown

Claim 1 recites "masking the JSP tags", "converting non-masked tags in the original JSP file into PvC device specific format tags", "unmasking the JSP tags", and "storing a transformed JSP file containing the PvC device specific format tags and the JSP tags". As can be seen, some tags are masked and unmasked (JSP tags), and other tags are converted (non-masked tags). Although Hawkins discloses converting and sending PvC device-dependent pages to a PvC device, the conversion described by Hawkins is the conversion to a highly compressed binary form just prior to sending the information to the device. Hawkins teaches that all tags are converted to binary in order to compress them, noting:

The wireless client 405 and the proxy server 180 use a special format for transferring screen 101 contents from the proxy server 180 to the wireless client 405... named Compact Markup Language (CML)... CML is a stream

of text and image data with imbedded formatting commands (tags). <u>The tags are imbedded as binary data and hence are very compact.</u>

Hawkins, column 21, line 33 through column 22, line 22.

The idea of masking some of the tags to protect them from conversion, as per the specific features recited in Claim 1, would go directly against the high compression of transmitted information that **Hawkins** teaches in converting all tags. Restated, the only conversion step discussed in **Hawkins** is the conversion to binary prior to sending the information to the client. Such a conversion to a completely different format (binary) is not conducive to masking of certain elements of the file, since masking to avoid conversion would prevent the extreme compression that **Hawkins** desires.

No Proper Motivation for Reference Combination

In addition to the claimed features that are not shown by the cited references, as described above, no proper motivation has been given for the combination, as Appellants will now show.

In providing a rationale for combining the teachings of Ginter to the teachings of Hawkins and Hunter, the Examiner states it would have been obvious to combine the masking of tags as taught by Ginter with the transformation of files for pervasive computing devices as taught by Hawkins and Hunter in order to "maintain the integrity, availability, and/or confidentiality of such information and processes related to such use". Appellants urge that such broad generalization fails to meet the specific legal requirements for making a combination. To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the examiner to show a motivation to combine the references that create the case of obviousness. In other words, the examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed. In re Rouffet, 149 F.3d 1350, 47 USPQ 2d 1453 (Fed. Cir. 1998). The Examiner has failed to meet this burden of proof requirement for making the Hawkins/Hunter/Ginter combination as the broad, generalized statement pertaining to 'maintaining integrity' does not show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the

elements from the cited prior art references for combination in the manner claimed. In addition, as previously described above, a person of ordinary skill in the art would not have been motivated to combine Ginter's masking with Hawkin's transformation as Hawkins expressly requires all tags to be transformed, and the masking of certain tags would expressly defeat such expressed desire and purpose.

In conclusion regarding the ground of rejection 1, Appellants have demonstrated that several elements of Claim 1 have not been shown in the references cites. Specifically, none of the cited references disclose or suggest the use of a JSP file in a conversion process, and none of the cited references teach or suggest the particular details regarding the conversion of regular web pages into web pages for small devices, as described above. Appellants have also demonstrated the lack of a proper motivation to combine the cited references. The rejection of group-representative Claim 1 is therefore clearly erroneous.

A.2. Claims 6, 13, 20 and 27

With respect to representative Claim 6, such claim recites "wherein parsing the original JSP file comprises: determining if a tag is encountered; if a tag is encountered, determining if the tag is an HTML tag; and if the tag is not an HTML tag, identifying the tag as a JSP tag". In rejecting Claim 6, the Examiner merely states (on page 5 of the most recent office action dated December 5, 2006) "the claims remain rejected for fully incorporating the deficiencies of their base claims". Appellants urge clear error in such basis for rejection, as it totally ignores the further, additional features recited in such dependent claims. According to this logic, if an independent claim is properly rejected, a dependent claim would never be allowable as it incorporates the features/deficiencies of the base, independent claim. This is clearly not the state of the law. Instead, dependent claims can, and in fact do, provide their own independent basis for patentability based upon the particular features recited in such a dependent claim.

Accordingly, the Examiner has failed to state a prima facie obviousness rejection against Claim 6 or any other claim in this grouping of claims.

A.3. Claims 7, 14, 21 and 28

With respect to representative Claim 7, such claim recites "wherein parsing the original JSP file further comprises: if a tag is not encountered, writing the JSP file content to a resultant file; if the tag is a HTML tag, writing the HTML tag to the resultant file; and if the tag is a JSP tag, writing the JSP tag to the resultant file embedded in an HTML comment tag". In rejecting Claim 7, the Examiner merely states (on page 5 of the most recent office action dated December 5, 2006) "the claims remain rejected for fully incorporating the deficiencies of their base claims". Appellants urge clear error in such basis for rejection, as it totally ignores the further, additional features recited in such dependent claim. According to this logic, if an independent claim is properly rejected, a dependent claim would never be allowable as it incorporates the features/deficiencies of the base, independent claim. This is clearly not the state of the law. Instead, dependent claims can, and in fact do, provide their own independent basis for patentability based upon the particular features recited in such a dependent claim. Accordingly, the Examiner has failed to state a prima facie obviousness rejection against Claim 7 or any other claim in this grouping of claims.

B. GROUND OF REJECTION 2 (Claims 2, 3, 9, 10, 16, 17, 23 and 24)

Claims 2, 3, 9, 10, 16, 17, 23 and 24 stand rejected under 35 U.S.C. § 103 as being unpatentable over **Hawkins** in view of **Hunter**, **Ginter**, and **Judson**, <u>Content Display During Idle Time as a User Waits for Information During an Internet Transaction</u>, U.S. Patent No. 6,185,586 (February 6, 2001) (hereinafter "**Judson**"). This rejection is respectfully traversed.

Judson does not make up for the deficiencies of Hawkins, Hunter and Ginter.

All of the claims in this rejection are dependent on one of the claims in the earlier rejection. Since the rejection of the independent claims has been shown to be in error, the rejection of these claims is similarly in error. Specifically, Hawkins/Hunter/Ginter does not disclose or suggest a single server performing the recited steps.

Hawkins/Hunter/Ginter also does not disclose or suggest that the file to be converted contains JSP pages or their equivalent, or a selective conversion of tags based on type of tag. Further, the references do not supply a proper motivation for their combination in

order to meet the claimed invention. Additionally, **Judson** does not make up for these deficiencies of **Hawkins/Hunter/Ginter**.

Additionally, one of ordinary skill would not combine the references to achieve the invention of representative Claim 2 because the references are directed towards solving different problems. It is necessary to consider the reality of the circumstances—in other words, common sense—in deciding in which fields a person of ordinary skill would reasonably be expected to look for a solution to the problem facing the inventor. In re Oetiker, 977 F.2d 1443 (Fed. Cir. 1992); In re Wood, 599 F.2d 1032, 1036, 202 U.S.P.Q. 171, 174 (CCPA 1979). In the case at hand, the cited references address distinct problems. Thus, no reason exists to establish that one of ordinary skill would reasonably be expected to look for a solution to the problem facing the inventor.

Accordingly, no teaching, suggestion, or motivation exists to combine the references and the Examiner has failed to state a prima facie obviousness rejection of Claim 2.

For example, **Hawkins** is directed to solving the problem of transmitting information on the Internet to a device that can only receive a relatively low bandwidth. For example, **Hawkins** provides that:

One area in which Web access is becoming more desirable is in handheld devices. Handheld devices are emerging as important computer devices. Handheld devices typically implement a relatively small, but important function set. Examples of such handheld devices are the PalmPilot.TM. handheld device available from 3COM Corporation, Inc. of Santa Clara, Calif. Examples of the function set supported are address books, calendars, and task lists. ...

An issue with using handheld devices to access the Web is related to their capabilities. Even if connected to a high bandwidth network, most handheld devices do not have the screen area or the processing power to display the graphics and large amounts of text in a typical web page. However, it is still desirable to support the browsing of information on the Web using handheld devices. It is further desirable that the handheld devices be able to use networks that have relatively low bandwidths. ...

Therefore what is desired is an improved system and method for handheld device to access Internet information over relative low bandwidth networks.

Hawkins, column 2, line 35 through column 3, line 28.

On the other hand, **Ginter** is directed to the problem of protecting electronic content. For example **Ginter** provides as follows: Telecommunications, financial transactions, government processes, business operations, entertainment, and personal business productivity all now depend on electronic appliances. Millions of these electronic appliances have been electronically connected together. These interconnected electronic appliances comprise what is increasingly called the "information highway." Many businesses, academicians, and government leaders are concerned about how to protect the rights of citizens and organizations who use this information (also "electronic" or "digital") highway.

Ginter, column 1, lines 41-50.

In still further contrast, **Judson** is directed to the problem of providing a user with information or activities that utilize the "downtime" that occurs between linking to a hypertext document and the final display of the document. For example, **Judson** provides as follows:

There is a finite time period between the time the user initiates the link and the return of the web page. Even when the web page is returned quickly, there is an additional time period during which formatting information must be processed for display on the display interface. For example, most web browsers display inline images (namely images next to text) using an X bit map (XBM) or .gif format. Each image takes time to process and slows downs the initial display of the document. The user typically "sees" an essentially unrecognizable "image" on the display screen which only gradually comes into focus. It is only after the entire image is downloaded from the server and then processed by the browser that the user can fully access the web page itself. This "waiting" period is even longer when the client machine has a relatively slow modem, and often the user will have to wait many seconds before being able to see the in-line image and/or begin using the web page. This problem will be exacerbated when the next generation browser technology (such as Netscape Navigator 2.0) becomes more widely implemented because such browsers are being designed to handle much more complex download formats (for more interactive, dynamic displays).

Judson, column 1, lines 40-61.

Based on the plain disclosures of the references themselves, the references address completely distinct problems that are unrelated to each other. The problem of transmitting information to a low-bandwidth device is completely distinct from the problem of protecting electronic content. Similarly, both of these problems are completely distinct from the problem of providing a user with downtime activities, as disclosed in **Judson**.

Because the references address completely distinct problems, one of ordinary skill would have no reason to combine or otherwise modify the references to achieve the inventions recited in these claims. Thus, no proper teaching, suggestion, or motivation exists to combine the references in the manner suggested by the Examiner.

B.1. Claims 2, 9, 16 and 23

In addition, Claim 2 recites "wherein masking the JSP tags includes embedding the JSP tags into HyperText Mark-up Language (HTML) comment tags, wherein the embedding step is performed at the server". As can be seen, one type of tag (JSP tag) is embedded into another type of tag (HTML tag). In rejecting this aspect of Claim 2, the Examiner asserts that Judson teaches use of comment tags to mask. It should be noted, however, that Judson does not teach masking of one type of tag (JSP tag) with another type of tag (HTML tags), but rather the masking of an information object (albeit, possibly containing other HTML tags) by an HTML tag. The resulting combination does not contemplate masking one type of tag – specifically a JSP tag – with another type of tag (an HTML tag). Accordingly, the Examiner has failed to state a prima facte obviousness rejection against Claim 2 or any other claim in this grouping of claims.

B.2. Claims 3, 10, 17 and 24

In addition, Claim 3 recites "wherein unmasking the JSP tags includes removing HTML comment tag identifiers from the HTML comment tags in which the JSP tags are embedded". The Examiner provides no description or discussion of where this claimed feature is taught by any of the cited references. Accordingly, the Examiner has failed to state a prima facte obviousness rejection against Claim 3 or any other claim in this grouping of claims.

C. GROUND OF REJECTION 3 (Claims 4-5, 11-12, 18-19 and 25-26)

Claims 4-5, 11-12, 18-19 and 25-26 stand rejected under 35 U.S.C. § 103 as being unpatentable over **Hawkins** in view of **Hunter**, **Ginter**, and **Ramaley** et al., <u>Method for Managing Embedded Files for a Document Saved in HTML Format</u>, U.S. Patent No. 6,585,777 (July 1, 2003) (hereinafter "**Ramaley**"). This rejection is respectfully traversed.

Ramaley does not make up for the deficiencies of Hawkins, Hunter and Ginter.

All of the claims in this rejection are dependent on one of the claims in the earlier rejection. Since the rejection of the independent claims has been shown to be in error, the

rejection of these claims is also in error. Specifically, Hawkins/Hunter/Ginter does not disclose or suggest a single server performing the recited steps. Hawkins/Hunter/Ginter also does not disclose or suggest that the file to be converted contains JSP pages or their equivalent, or a selective conversion of tags based on type of tag. Further, the references do not supply a proper motivation for their combination in order to meet the claimed invention. Additionally, Ramaley does not make up for these deficiencies of Hawkins/Hunter/Ginter.

Additionally, one of ordinary skill would not combine the references to achieve the invention of representative Claim 4 because the references are directed towards solving different problems. It is necessary to consider the reality of the circumstances—in other words, common sense—in deciding in which fields a person of ordinary skill would reasonably be expected to look for a solution to the problem facing the inventor. In re Oetiker, 977 F.2d 1443 (Fed. Cir. 1992); In re Wood, 599 F.2d 1032, 1036, 202 U.S.P.Q. 171, 174 (CCPA 1979). In the case at hand, the cited references address distinct problems. Thus, no reason exists to establish that one of ordinary skill would reasonably be expected to look for a solution to the problem facing the inventor.

Accordingly, no teaching, suggestion, or motivation exists to combine the references and the Examiner has failed to state a prima facie obviousness rejection of Claim 4.

For example, **Hawkins** is directed to solving the problem of transmitting information on the Internet to a device that can only receive a relatively low bandwidth. For example, **Hawkins** provides that:

One area in which Web access is becoming more desirable is in handheld devices. Handheld devices are emerging as important computer devices. Handheld devices typically implement a relatively small, but important function set. Examples of such handheld devices are the PalmPilot.TM. handheld device available from 3COM Corporation, Inc. of Santa Clara, Calif. Examples of the function set supported are address books, calendars, and task lists. ...

An issue with using handheld devices to access the Web is related to their capabilities. Even if connected to a high bandwidth network, most handheld devices do not have the screen area or the processing power to display the graphics and large amounts of text in a typical web page. However, it is still desirable to support the browsing of information on the Web using handheld devices. It is further desirable that the handheld devices be able to use networks that have relatively low bandwidths. ...

Therefore what is desired is an improved system and method for

handheld device to access Internet information over relative low bandwidth networks.

Hawkins, column 2, line 35 through column 3, line 28.

On the other hand, **Ginter** is directed to the problem of protecting electronic content. For example **Ginter** provides as follows:

Telecommunications, financial transactions, government processes, business operations, entertainment, and personal business productivity all now depend on electronic appliances. Millions of these electronic appliances have been electronically connected together. These interconnected electronic appliances comprise what is increasingly called the "information highway." Many businesses, academicians, and government leaders are concerned about how to protect the rights of citizens and organizations who use this information (also "electronic" or "digital") highway.

Ginter, column 1, lines 41-50.

In still further contrast, **Ramaley** is directed to the problem of managing embedded content in HTML format. For example, **Ramaley** provides as follows:

Users have clear expectations of how embedded content management should work. These expectations have been established from years of using traditional desktop productivity tools, such as word processing programs, which typically enable both embedding content in a primary document and editing the embedded content. In contrast, for Hyper Text Mark-up Language (HTML)-formatted documents, such as web pages, each piece of content is required to be a separate linked file. In other words, HTML does not directly support the concept of embedding content in the primary document. Nevertheless, the expectations of users have not changed in this HTML-formatted document environment because they still desire HTML documents to support the characteristics of embedded content.

Ramaley, column 1, lines 15-28.

Based on the plain disclosures of the references themselves, the references address completely distinct problems that are unrelated to each other. The problem of transmitting information to a low-bandwidth device is completely distinct from the problem of protecting electronic content. Similarly, both of these problems are completely distinct from the problem of managing embedded content in HTML format, as disclosed in **Ramaley**.

Because the references address completely distinct problems, one of ordinary skill would have no reason to combine or otherwise modify the references to achieve the inventions recited in these claims. Thus, no proper teaching, suggestion, or motivation exists to combine the references in the manner suggested by the Examiner. Accordingly, the Examiner has failed to state a *prima* facie obviousness rejection against Claim 4 or any other claim in this grouping of claims.

D. GROUND OF REJECTION 4 (Claims 29-31)

Claims 29-31 stand rejected under 35 U.S.C. § 103 as being unpatentable over **Hawkins** in view of **Hunter**, **Ginter**, and **Toyouchi** et al., <u>Service Providing System and Method Which Divides a Request into Plural Service Requests and Provides an Integrated Service Based on Service Utilization History Information in Response to the Request, U.S. Patent No. 6,847,988 (January 25, 2005) (hereinafter "Toyouchi"). This rejection is respectfully traversed.</u>

Toyouchi does not make up for the deficiencies of Hawkins, Hunter and Ginter.

All of the claims in this rejection are dependent on one of the claims in the earlier rejection. Since the rejection of the independent claims has been shown to be in error, the rejection of these claims is also in error. Specifically, Hawkins/Hunter/Ginter does not disclose or suggest a single server performing the recited steps. Hawkins/Hunter/Ginter also does not disclose or suggest that the file to be converted contains JSP pages or their equivalent, or a selective conversion of tags based on type of tag. Further, the references do not supply a proper motivation for their combination in order to meet the claimed invention. Additionally, Toyouchi does not make up for these deficiencies of Hawkins/Hunter/Ginter.

Additionally, one of ordinary skill would not combine the references to achieve the invention of representative Claim 29 because the references are directed towards solving different problems. It is necessary to consider the reality of the circumstances—in other words, common sense—in deciding in which fields a person of ordinary skill would reasonably be expected to look for a solution to the problem facing the inventor. In re Oetiker, 977 F.2d 1443 (Fed. Cir. 1992); In re Wood, 599 F.2d 1032, 1036, 202 U.S.P.Q. 171, 174 (CCPA 1979). In the case at hand, the cited references address distinct problems. Thus, no reason exists to establish that one of ordinary skill would reasonably be expected to look for a solution to the problem facing the inventor. Accordingly, no teaching, suggestion, or motivation exists to combine the references and the Examiner has failed to state a prima facie obviousness rejection of Claim 29.

For example, **Hawkins** is directed to solving the problem of transmitting information on the Internet to a device that can only receive a relatively low bandwidth. For example, **Hawkins** provides that:

One area in which Web access is becoming more desirable is in handheld devices. Handheld devices are emerging as important computer devices. Handheld devices typically implement a relatively small, but important function set. Examples of such handheld devices are the PalmPilot.TM. handheld device available from 3COM Corporation, Inc. of Santa Clara, Calif. Examples of the function set supported are address books, calendars, and task lists. ...

An issue with using handheld devices to access the Web is related to their capabilities. Even if connected to a high bandwidth network, most handheld devices do not have the screen area or the processing power to display the graphics and large amounts of text in a typical web page. However, it is still desirable to support the browsing of information on the Web using handheld devices. It is further desirable that the handheld devices be able to use networks that have relatively low bandwidths. ...

Therefore what is desired is an improved system and method for handheld device to access Internet information over relative low bandwidth networks.

Hawkins, column 2, line 35 through column 3, line 28.

On the other hand, **Ginter** is directed to the problem of protecting electronic content. For example **Ginter** provides as follows:

Telecommunications, financial transactions, government processes, business operations, entertainment, and personal business productivity all now depend on electronic appliances. Millions of these electronic appliances have been electronically connected together. These interconnected electronic appliances comprise what is increasingly called the "information highway." Many businesses, academicians, and government leaders are concerned about how to protect the rights of citizens and organizations who use this information (also "electronic" or "digital") highway.

Ginter, column 1, lines 41-50.

In still further contrast, **Toyouch**i is directed to the problem of providing end users with the capability to effectively utilize information services. For example, **Toyouchi** provides as follows:

> (1) It is difficult to find out a service desired by an end user. In other words, even when a certain information providing computer provides a service desired by the end user, if the end user does not know of the existence of this information providing computer and/or connection destinations, then the end user cannot utilize this service. It is practically difficult for the end user to personally grasp a huge number of service

- contents of information providing computers and a large number of connection destinations. Thus, the end user can hardly utilize his truly desirable services.
- (2) It is difficult to utilize a suitable service, depending upon a change in conditions. In other words, not only a large number of information providers enter into information service businesses every day, but also the presently available services of the existing information providing computers are frequently changed and/or added with other services every day. End users can hardly, personally grasp all of these changes. As a result, even though it is highly likely that better services are newly added, the end users may fixedly utilizing specific services. Also system environments and qualities of information/services may change contents of services which can give higher satisfaction to the requests of the end users. It is practically difficult that the end users systematically evaluate these conditions and thus select the proper services in accordance with this change.
- (3) It is difficult to discriminate services from each other based on desires and service utilization histories of end users. The desires and service utilization histories of end users are grasped only by these end users themselves. As a consequence, the information providing computers cannot select the proper services which can provide the higher rate of satisfaction to the requests of the respective end users, but therefore the end users themselves must retrieve their desirable services and also must hold/manage the service utilization histories.
- (4) When services of a plurality of information providing computers are integrated to be received, procedures by end users become cumbersome. That is, when a complex service provided by a plurality of information providing computers is received, an end user must be sequentially connected with the respective information providing computers, must retrieve the contents of the individual services, must propose the individual service utilizations, and must adjust these services individually. Also, the end user is required to pay his fee to the received services from the respective information providers. In particular, an abundance of time and workloads on the part of the end user are required so as to adjust combinations of the plural services.

Toyouchi, column 1, line 60 through column 2, line 41.

Based on the plain disclosures of the references themselves, the references address completely distinct problems that are unrelated to each other. The problem of transmitting information to a low-bandwidth device is completely distinct from the problem of protecting electronic content. Similarly, both of these problems are completely distinct from the problem of helping end users to effectively utilize information services, as disclosed in **Toyouchi**.

Because the references address completely distinct problems, one of ordinary skill would have no reason to combine or otherwise modify the references to achieve the inventions recited in these claims. Thus, no proper teaching, suggestion, or motivation exists to combine the references in the manner suggested by the Examiner. Accordingly, the Examiner has failed to state a *prima* facie obviousness rejection against Claim 29 or any other claim in this grouping of claims.

Therefore, Appellants have shown numerous and substantial error in the Examiner's final rejection of all pending claims, and request that the Board reverse such final rejection.

> /Wayne P. Bailey/ Wayne P. Bailey Reg. No. 34,289 YEE & ASSOCIATES, P.C. PO Box 802333 Dallas, TX 75380 (972) 385-8777

CLAIMS APPENDIX

The text of the claims involved in the appeal are:

 A method of transforming an original Java Server Page (JSP) file into a pervasive computing (PvC) device specific JSP file, comprising:

receiving a request for the original JSP file at a server, wherein the request is sent from the PvC device, and wherein the original JSP file is stored on the server;

parsing the original JSP file for JSP tags;

masking the JSP tags;

converting non-masked tags in the original JSP file into PvC device specific format tags; unmasking the JSP tags; and

storing a transformed JSP file containing the PvC device specific format tags and the JSP tags, wherein the parsing, masking, converting, unmasking and storing steps are performed by the server.

- The method of claim 1, wherein masking the JSP tags includes embedding the JSP tags into HyperText Mark-up Language (HTML) comment tags, wherein the embedding step is performed at the server.
- The method of claim 2, wherein unmasking the JSP tags includes removing HTML comment tag identifiers from the HTML comment tags in which the JSP tags are embedded.
- 4. The method of claim 1, wherein storing the transformed JSP file includes storing the transformed JSP file with a filename that is unique to the particular PvC device for which the transformed JSP file is formatted.
- The method of claim 4, wherein the filename has a unique extension for the PvC device for which the transformed JSP file is formatted.

- 6. The method of claim 1, wherein parsing the original JSP file comprises: determining if a tag is encountered; if a tag is encountered, determining if the tag is an HTML tag; and if the tag is not an HTML tag, identifying the tag as a JSP tag.
- 7. The method of claim 6, wherein parsing the original JSP file further comprises: if a tag is not encountered, writing the JSP file content to a resultant file; if the tag is a HTML tag, writing the HTML tag to the resultant file; and if the tag is a JSP tag, writing the JSP tag to the resultant file embedded in an HTML comment tag.
- A server for transforming an original Java Server Page (JSP) file into a pervasive computing (PvC) device specific JSP file, the server comprising:
 - a processor; and
- a storage device, connected to the processor, said storage device containing the original ISP file:

wherein the processor receives a request from a PvC device for the original JSP file, parses the original JSP file stored on the storage device for JSP tags, masks the JSP tags, converts non-masked tags in the original JSP file into PvC device specific format tags, unmasks the JSP tags, and stores a transformed JSP file containing the PvC device specific format tags and the JSP tags on the storage device.

- The server of claim 8, wherein the processor masks the JSP tags by embedding the JSP tags into HyperText Mark-up Language (HTML) comment tags.
- 10. The server of claim 9, wherein the processor unmasks the JSP tags by removing HTML comment tag identifiers from the HTML comment tags in which the JSP tags are embedded.
- 11. The server of claim 8, wherein the processor stores the transformed JSP file with a filename that is unique to the particular PvC device for which the transformed JSP file is formatted.

- 12. The server of claim 11, wherein the filename has a unique extension for the PvC device for which the transformed JSP file is formatted.
- 13. The server of claim 8, wherein while the processor parses the JSP file the processor: determines if a tag is encountered:

if a tag is encountered, determines if the tag is an HTML tag; and if the tag is not an HTML tag, identifies the tag as a JSP tag.

14. The server The apparatus of claim 8, wherein while the processor parses the JSP file, the processor further:

writes the JSP file content to a resultant file, if a tag is not encountered;
writes the HTML tag to the resultant file, if the tag is a HTML tag; and
writes the JSP tag to the resultant file embedded in an HTML comment tag, if the tag is a
JSP tag.

15. A computer program product in a computer readable medium for transforming an original Java Server Page (JSP) file into a pervasive computing (PvC) device specific JSP file, comprising:

first instructions for receiving a request for the original JSP file at a server, wherein the request is sent from the PvC device, and wherein the original JSP file is stored on the server; second instructions for parsing the original JSP file for JSP tags:

third instructions for masking the JSP tags:

fourth instructions for converting non-masked tags in the original JSP file into PvC device specific format tags:

fifth instructions for unmasking the JSP tags; and

sixth instructions for storing a transformed JSP file containing the PvC device specific format tags and the JSP tags, wherein the second, third, fourth, fifth, and sixth instructions are performed by the server.

- 16. The computer program product of claim 15, wherein the second instructions include instructions for embedding the JSP tags into HyperText Mark-up Language (HTML) comment tags, wherein embedding of JSP tags is performed at the server.
- 17. The computer program product of claim 16, wherein the fourth instructions include instructions for removing HTML comment tag identifiers from the HTML comment tags in which the JSP tags are embedded.
- 18. The computer program product of claim 15, wherein the fifth instructions include instructions for storing the transformed JSP file with a filename that is unique to the particular PvC device for which the transformed JSP file is formatted.
- 19. The computer program product of claim 18, wherein the filename has a unique extension for the PvC device for which the transformed JSP file is formatted.
- 20. The computer program product of claim 15, wherein the second instructions include instructions for:

determining if a tag is encountered;

if a tag is encountered, determining if the tag is an HTML tag; and if the tag is not an HTML tag, identifying the tag as a JSP tag.

21. The computer program product of claim 20, wherein the second instructions further include instructions for:

writing the JSP file content to a resultant file, if a tag is not encountered;
writing the HTML tag to the resultant file, if the tag is an HTML tag; and
writing the JSP tag to the resultant file embedded in an HTML comment tag, if the tag is
a JSP tag.

 A system for transforming an original Java Server Page (JSP) file into a pervasive computing (PvC) device specific JSP file, comprising: means for receiving a request for the original JSP file at a server, wherein the request is sent from the PvC device, and wherein the original JSP file is stored on the server;

means for parsing the original JSP file for JSP tags;

means for masking the JSP tags;

means for converting non-masked tags in the original JSP file into PvC device specific format tags;

means for unmasking the JSP tags; and

means for storing a transformed JSP file containing the PvC device specific format tags and the JSP tags, wherein the means for parsing, masking, converting, unmasking and storing are performed by the server.

- 23. The system of claim 22, wherein the means for masking embeds the JSP tags into HyperText Mark-up Language (HTML) comment tags, wherein embedding of JSP tags is performed at the server.
- 24. The system of claim 23, wherein the means for unmasking removes HTML comment tag identifiers from the HTML comment tags in which the JSP tags are embedded.
- 25. The system of claim 22, wherein the means for storing stores the transformed JSP file with a filename that is unique to the particular PvC device for which the transformed JSP file is formatted.
- 26. The system of claim 25, wherein the filename has a unique extension for the PvC device for which the transformed JSP file is formatted.
- 27. The system of claim 22, wherein the means for parsing determines if a tag is encountered, determines if the tag is an HTML tag, if a tag is encountered, and if the tag is not an HTML tag, identifies the tag as a JSP tag.
- 28. The system of claim 27, wherein the means for parsing further writes the JSP file content to a resultant file, if a tag is not encountered, writes the HTML tag to the resultant file, if the tag

is an HTML tag, and writes the JSP tag to the resultant file embedded in an HTML comment tag, if the tag is a JSP tag.

29. (Previously presented) The method of claim 1, further comprising:

in response to receiving the request, determining a type of the PvC device based on a header of the request; and

locating the original JSP file in the server based on a filename of the original JSP file corresponding to the type of PvC device.

30. The computer program product of claim 15, further comprising:

in response to receiving the request, seventh instructions for determining a type of the PvC device based on a header of the request; and

eighth instructions for locating the original JSP file in the server based on a filename of the original JSP file corresponding to the type of PvC device.

31. The system of claim 22, further comprising:

in response to receiving the request, means for determining a type of the PvC device based on a header of the request; and

means for locating the original JSP file in the server based on a filename of the original JSP file corresponding to the type of PvC device.

EVIDENCE APPENDIX

There is no evidence to be presented.

RELATED PROCEEDINGS APPENDIX

There are no related proceedings.